

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023170**Date Inspected:** 02-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No			
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006	Component:	OBG Trial Assembly				

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Incident Report generated at Segment 12AW (Edge Panel I-Rib)

This Quality Assurance (QA) Inspector wrote an Incident Report for mis-drilling the Edge Panel I-Ribs and damaging the fillet weld and I-Rib base material at PP 110 for Segment 12AW, Counter Weight side. Please reference the Incident Report # 04-0120F4_TL-15_B278_05-02-2011_Edge Panel_I-Rib_Mis-Drilled dated May 02, 2011 for further detail.

Please reference the pictures attached for more comprehensive details.

Segment 12AW (Partial Height Diaphragm)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Partial Height Diaphragm flange to the Side Panel at FL3 location at Panel Points (PP) 110, PP 111 and PP 112 for Segment 12AW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The

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Inspection was performed against Notification No. 00670 dated May 02, 2011.

The bolt sizes used were M24 x 65 RC Lot # DHGM240013 and the final torque value established was 967 N-m.

The Manual Torque wrench used was Serial No. XO2-777.

Segment 12BW (Triangular Plate)

This QA Inspector witnessed final bolt tension verification on bolts connecting triangular plate of the stiffeners of Floor Beam and full height Longitudinal Diaphragm at elevations 1772 mm and at 3332mm from Bottom Panel at work point W4 (Cross Beam side) at Panel Points (PP) 113.5 (east side) and PP 114 (west side) for Segment 12BW. Inspected the bolt tensioning on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00670 Dated May 02, 2011.

The bolt sizes used were M22 x 80 RC Lot # DHGM220118 and the final torque value established was 467 N-m.

The Manual Torque wrench used was Serial No. XO2-777.

Segment 12AW (Angle Plate)

This QA Inspector witnessed final bolt tension verification on bolts connecting Angle plate to full height Longitudinal Diaphragm below the manhole at work point W4 (Cross Beam side) and at work point W3 (Counter Weight side) between Panel Points (PP) 112 to PP 112.5 for Segment 12BW. Inspected the bolt tensioning on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00670 Dated May 02, 2011.

The bolt sizes used were M22 x 75 RC Lot # DHGM220014 and the final torque value established was 473 N-m.

The bolt sizes used were M22 x 75 RC Lot # DHGM220034 and the final torque value established was 453 N-m.

The Manual Torque wrench used was Serial No. XO2-777.

Segment 12BW (Angle Plate)

This QA Inspector witnessed final bolt tension verification on bolts connecting Angle plate to full height Longitudinal Diaphragm below the manhole at work point W4 (Cross Beam side) and at work point W3 (Counter Weight side) between Panel Points (PP) 113 to PP 113.5 and 114 to PP 114.5 for Segment 12BW. Inspected the bolt tensioning on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00670 Dated May 02, 2011.

The bolt sizes used were M22 x 75 RC Lot # DHGM220014 and the final torque value established was 473 N-m.

The bolt sizes used were M22 x 75 RC Lot # DHGM220034 and the final torque value established was 453 N-m.

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The Manual Torque wrench used was Serial No. XO2-777.

Segment 12CW (Angle Plate)

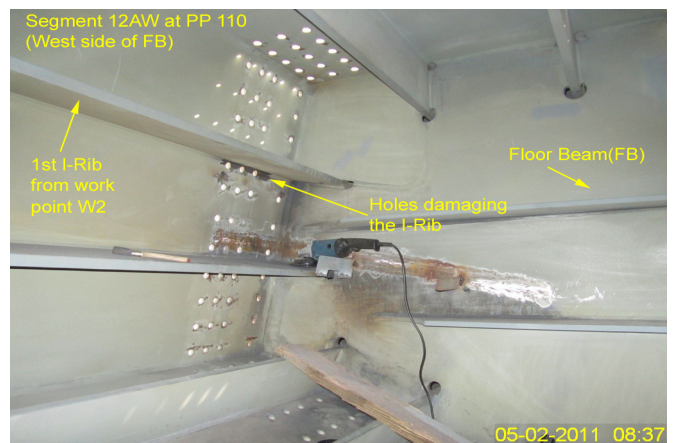
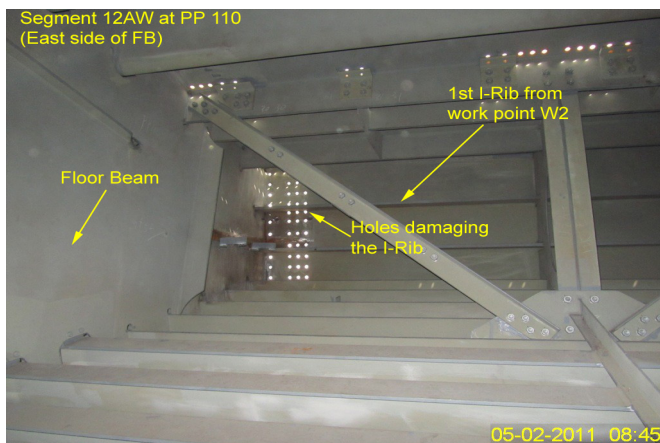
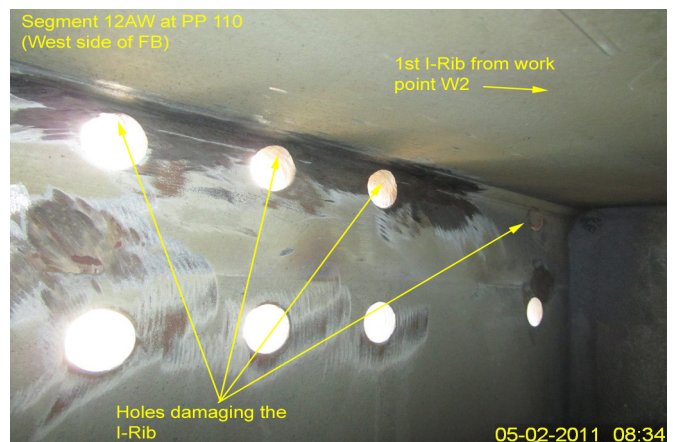
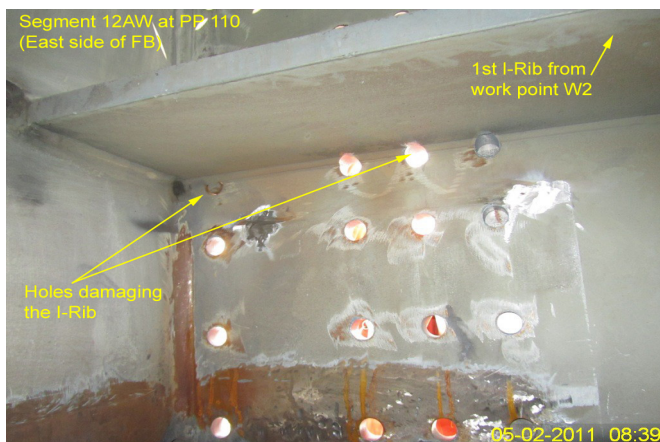
This QA Inspector witnessed final bolt tension verification on bolts connecting Angle plate to full height Longitudinal Diaphragm below the manhole at work point W4 (Cross Beam side) and at work point W3 (Counter Weight side) between Panel Points (PP) 115.2 to PP 115.5 for Segment 12CW. Inspected the bolt tensioning on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00670 Dated May 02, 2011.

The bolt sizes used were M22 x 75 RC Lot # DHGM220014 and the final torque value established was 473 N-m.

The bolt sizes used were M22 x 75 RC Lot # DHGM220034 and the final torque value established was 453 N-m.

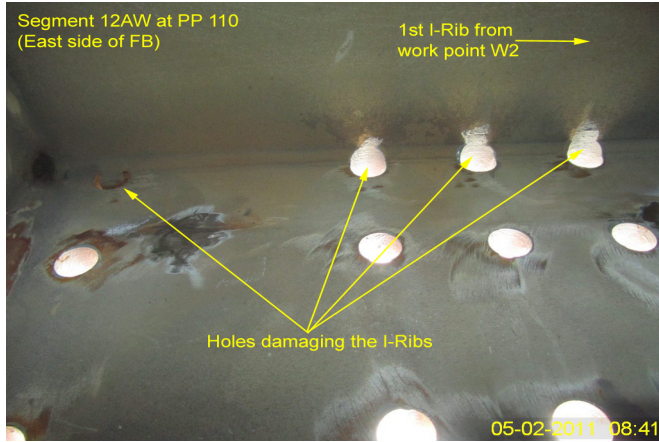
The Manual Torque wrench used was Serial No. XO2-777.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
